

Abstract

A method and apparatus for receiving video signals from a plurality of video cameras, such as in a video surveillance system. The video cameras are each coupled to provide a video signal to a respective input of a multiplexer. The multiplexer routes a selected one of the video signals to a video decoder. The video decoder receives the selected video signal and is conditioned according to the video signal. This includes synchronizing the video decoder to a frequency and phase of the video signal, controlling a gain level for the video signal and adjusting a dc clamping level for dc restoration of the video signal. Parameters representative of each of these quantities are stored in association with the identity of the corresponding video camera. The video decoder also places each video signal into a format suitable for storage in a storage device and for display by a display device. As the multiplexer is utilized to cycle through the cameras according to a sequence, the parameters for each camera are retrieved and utilized to initialize the video decoder for decoding the video signal received from the corresponding camera. As a result, the amount of time required to condition the video decoder according to the video signal received from each camera is significantly reduced. Accordingly, the present invention allows a surveillance system to cycle through a plurality of cameras in less time than prior systems having a single decoder, but without higher costs associated with prior systems which employ multiple video decoders.